	Application No.	Applicant(s)
Notice of Allowability	10/086,761	LAHTI ET AL.
	Examiner	Art Unit	
	Sara M. Hanne	2179	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *7/22/95*.

2. ☒ The allowed claim(s) is/are *1-6, 8-18, 20-29 and 31-38* .

3. ☒ The drawings filed on *28 February 2002* are accepted by the Examiner.

4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some*   c) ☐ None of the:

       1. ☐ Certified copies of the priority documents have been received.

       2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

       3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

       1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____ .

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of

       Paper No./Mail Date _____ .

    Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)

6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

BA HUYNH
PRIMARY EXAMINER

EXAMINER'S AMENDMENT

1.   An examiner's amendment to the record appears below. Should the changes

and/or additions be unacceptable to applicant, an amendment may be filed as provided

by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be

submitted no later than the payment of the issue fee.

2.   Authorization for this examiner's amendment was given in a telephone interview

with Steven J. Laureanti on 8/3/05.

3.   In the specification, amend the paragraph appearing at page 1, lines 1-6, as
follows:

RELATED APPLICATIONS

        This application claims the benefit under 35 U.S.C. § 119(e) of U.S. Provisional

Application Nos. 60/300,240 and 60/300,276, both filed June 22, 2001.

        This application is related to co-pending U.S. Application Nos. 09/551,899 filed April

19, 2000; 09/948,500 filed September 6, 2001; and ~~10/~~_____,_____ 10/086,757 filed February

28, ~~2002 (Attorney Docket 020431.0968).~~ 2002.

4.   In the claims, make amendments to Claims 1, 10, 13, 22, 24, 33, 36, and 38 as

seen in the full set of Claims below.

        1.   A system for automatically generating a graphical user interface (GUI)

element at a client system according to a current configuration model, comprising:

        a first frame associated with a web page comprising a JavaServer Page (JSP)

and generated at a server system for communication to a client system in connection

with a configuration workflow, when generated the first frame comprising data reflecting the current configuration model, when generated the first frame further comprising a JavaScript function operable when executed at the client system in response to a call to automatically:

receive a configuration choice selection at a first GUI element;

access the data stored in the first frame reflecting the current configuration model;

according to the accessed data, determine one or more configuration choices for which a second GUI element needs to be drawn for display to a user associated with the client system in connection with the configuration workflow in response to the configuration choice selection of the first GUI element; and

make a callback requesting that the second GUI element for the one or more configuration choices be drawn; and

a second frame associated with the web page comprising a JSP and generated at the server system for communication to the client system in association with the first frame, when generated the second frame comprising one or more parameters specifying the second GUI element that will be appropriate for the one or more configuration choices depending on the current configuration model as reflected in the data stored in the first frame in response to the configuration choice selection, when generated the second frame further comprising a JavaScript code operable when executed at the client system to automatically:

call the JavaScript function of the first frame to determine the one or more configuration choices for which the second GUI element needs to be displayed to the user associated with the client system in connection with the configuration workflow;

receive a callback from the JavaScript function of the first frame requesting that the second GUI element for the one or more configuration choices be drawn; and

according to the one or more parameters stored in the second frame, draw the second GUI element that is appropriate for the one or more configuration choices.

2.   The system of Claim 1, wherein the second GUI element appropriate for the one or more configuration choices is generated on the fly at the client system.

3.   The system of Claim 1, wherein the first frame is operable to reflect a change to the configuration model independent of the configuration choice selection at the first GUI element subsequent to the change, the first frame when generated in connection with a configuration workflow initiated before the change comprising data reflecting the configuration model before the change, the first frame when generated in connection with a configuration workflow initiated after the change comprising data reflecting the configuration model after the change.

4.   The system of Claim 1, wherein the first and second frames belong to a frameset associated with the web page and are communicated to the client system in response to the user initiating the configuration workflow.

5.   The system of Claim 1, wherein the configuration model is a product configuration model, the configuration workflow is workflow to configure a product, and the one or more configuration choices is associated with one or more available selections for configuring a corresponding portion of the product.

6.   The system of Claim 1, wherein the second GUI element for the one or more configuration choices is associated with a dynamic Hypertext Markup Language (DHTML) layer and comprises one of a label, a radio button, a drop-down list box, and a check box.

8.   The system of Claim 1, wherein:
the first frame comprises a non-viewable configuration application program interface (API) frame; and
the second frame comprises one of a plurality of viewable configuration dialog frames associated with the web page.

9.   The system of Claim 1, wherein the second frame is operable to cause a connector to be created for the second GUI element for the one or more configuration choices in response to generation of the second GUI element, the connector providing an active link between the second GUI element and a property of a configuration element associated with the configuration choice, the connector allowing the second GUI element to be automatically re-drawn in response to the configuration choice selection during the configuration workflow affecting the property of the configuration element without requiring the second frame to be re-drawn in its entirety at the client system.

10.   The system of Claim 9, wherein:
        the first frame comprises a plurality of <u>JavaScript</u> functions each operable when executed at the client system in response to a call to create a connector for a corresponding type of GUI element; and
        the second frame comprises <u>JavaScript</u> code associated with the second GUI element for the one or more configuration choices the <u>JavaScript</u> code being generated automatically at runtime at the client system in response to generation of the second GUI element and operable to automatically call the <u>JavaScript</u> function in the first frame corresponding to the type of GUI element to create a connector for the second GUI element.

11.   The system of Claim 1, further comprising a third frame associated with the web page and generated at the server system for communication to the client system in association with the first and second frames, when executed at the client system the third frame operable to:
        receive from the second frame data representing a configuration choice selection associated with the second GUI element;
        post the data received from the second frame as a Hypertext Transfer Protocol (HTTP) request to the server system;

receive an HTTP response from the server system comprising data reflecting a current state of a configuration in relation to the configuration model, the current state reflecting the configuration choice selection at the second GUI element; and

communicate the data received from the server system to the second frame to initiate updating of a third GUI element.

12.   The system of Claim 1, wherein the system consists of the web page comprising the first and second frames.

13.   A method for automatically generating a graphical user interface (GUI) element at a client system according to a current configuration model, comprising:

generating a first frame associated with a web page comprising a JavaServer Page (JSP) and generated at a server system for communication to a client system in connection with a configuration workflow, when generated the first frame comprising data reflecting the current configuration model, when generated the first frame further comprising a JavaScript function operable when executed at the client system in response to a call to automatically:

receive a configuration choice selection at a first GUI element;

access the data stored in the first frame reflecting the current configuration model;

according to the accessed data, determine one or more configuration choices for which a second GUI element needs to be drawn for display to a user associated with the client system in connection with the configuration workflow in response to the configuration choice selection of the first GUI element; and

make a callback requesting that the second GUI element for the one or more configuration choices be drawn; and

generating a second frame associated with the web page comprising a JSP and generated at the server system for communication to the client system in association with the first frame, when generated the second frame comprising one or more parameters specifying the second GUI element that will be appropriate for the one or

more configuration choices depending on the current configuration model as reflected in the data stored in the first frame in response to the configuration choice selection, when generated the second frame further comprising a JavaScript code operable when executed at the client system to automatically:

call the JavaScript function of the first frame to determine the one or more configuration choices for which the second GUI element needs to be displayed to the user associated with the client system in connection with the configuration workflow;

receive a callback from the JavaScript function of the first frame requesting that the second GUI element for the one or more configuration choices be drawn; and

according to the one or more parameters stored in the second frame, draw the second GUI element that is appropriate for the one or more configuration choices.

14.   The method of Claim 13, wherein the second GUI element appropriate for the one or more configuration choices is generated on the fly at the client system.

15.   The method of Claim 13, wherein the first frame is operable to reflect a change to the configuration model independent of the configuration choice selection at the first GUI element subsequent to the change, the first frame when generated in connection with a configuration workflow initiated before the change comprising data reflecting the configuration model before the change, the first frame when generated in connection with a configuration workflow initiated after the change comprising data reflecting the configuration model after the change.

16.   The method of Claim 13, wherein the first and second frames belong to a frameset associated with the web page and are communicated to the client system in response to the user initiating the configuration workflow.

17.   The method of Claim 13, wherein the configuration model is a product configuration model, the configuration workflow is workflow to configure a product, and

the one or more configuration choices is associated with one or more available selections for configuring a corresponding portion of the product.

18.   The method of Claim 13, wherein the second GUI element for the one or more configuration choices is associated with a dynamic Hypertext Markup Language (DHTML) layer and comprises one of a label, a radio button, a drop-down list box, and a check box.

20.   The method of Claim 13, wherein:

the first frame comprises a non-viewable configuration application program interface (API) frame; and

the second frame comprises one of a plurality of viewable configuration dialog frames associated with the web page.

21.   The method of Claim 13, wherein the second frame is operable to cause a connector to be created for the second GUI element for the one or more configuration choices in response to generation of the second GUI element, the connector providing an active link between the second GUI element and a property of a configuration element associated with the configuration choice, the connector allowing the second GUI element to be automatically re-drawn in response to the configuration choice selection during the configuration workflow affecting the property of the configuration element without requiring the second frame to be re-drawn in its entirety at the client system.

22.   The method of Claim 21, wherein:

the first frame comprises a plurality of JavaScript functions each operable when executed at the client system in response to a call to create a connector for a corresponding type of GUI element; and

the second frame comprises JavaScript code associated with the second GUI element for the one or more configuration choices the JavaScript code being generated

automatically at runtime at the client system in response to generation of the second GUI element and operable to automatically call the JavaScript function in the first frame corresponding to the type of GUI element to create a connector for the second GUI element.

23.   The method of Claim 13, further comprising generating a third frame associated with the web page at the server system for communication to the client system in association with the first and second frames, when executed at the client system the third frame operable to:

receive from the second frame data representing a configuration choice selection associated with the second GUI element;

post the data received from the second frame as a Hypertext Transfer Protocol (HTTP) request to the server system;

receive an HTTP response from the server system comprising data reflecting a current state of a configuration in relation to the configuration model, the current state reflecting the configuration choice selection at the second GUI element; and

communicate the data received from the server system to the second frame to initiate updating of a third GUI element.

24.   Software for automatically generating a graphical user interface (GUI) element at a client system according to a current configuration model, the software being embodied in computer-readable media and when executed operable to:

generate a first frame associated with a web page comprising a JavaServer Page (JSP) and generated at a server system for communication to a client system in connection with a configuration workflow, when generated the first frame comprising data reflecting the current configuration model, when generated the first frame further comprising a JavaScript function operable when executed at the client system in response to a call to automatically:

receive a configuration choice selection at a first GUI element;

access the data stored in the first frame reflecting the current configuration model;

according to the accessed data, determine one or more configuration choices for which a second GUI element needs to be drawn for display to a user associated with the client system in connection with the configuration workflow in response to the configuration choice selection of the first GUI element; and

make a callback requesting that the second GUI element for the one or more configuration choices be drawn; and

generate a second frame associated with the web page comprising a JSP and generated at the server system for communication to the client system in association with the first frame, when generated the second frame comprising one or more parameters specifying the GUI element that will be appropriate for the configuration choice depending on the current configuration model as reflected in the data stored in the first frame, when generated the second frame further comprising a JavaScript code operable when executed at the client system to automatically:

call the JavaScript function of the first frame to determine a configuration choice for which an appropriate GUI element needs to be displayed to the user associated with the client system in connection with the configuration workflow;

receive a callback from the JavaScript function of the first frame requesting that an appropriate GUI element for the configuration choice be drawn; and

according to the one or more parameters stored in the second frame, draw the GUI element that is appropriate for the configuration choice.

25.   The software of Claim 24, wherein the second GUI element appropriate for the one or more configuration choices is generated on the fly at the client system.

26.   The software of Claim 24, further operable to reflect a change to the configuration model independent of the configuration choice selection at the first GUI element subsequent to the change, the first frame when generated in connection with a configuration workflow initiated before the change comprising data reflecting the

configuration model before the change, the first frame when generated in connection with a configuration workflow initiated after the change comprising data reflecting the configuration model after the change.

27.   The software of Claim 24, wherein the first and second frames belong to a frameset associated with the web page and are communicated to the client system in response to the user initiating the configuration workflow.

28.   The software of Claim 24, wherein the configuration model is a product configuration model, the configuration workflow is workflow to configure a product, and the one or more configuration choices is associated with one or more available selections for configuring a corresponding portion of the product.

29.   The software of Claim 24, wherein the second GUI element for the one or more configuration choices is associated with a dynamic Hypertext Markup Language (DHTML) layer and comprises one of a label, a radio button, a drop-down list box, and a check box.

31.   The software of Claim 24, wherein:

the first frame comprises a non-viewable configuration application program interface (API) frame; and

the second frame comprises one of a plurality of viewable configuration dialog frames associated with the web page.

32.   The software of Claim 24, wherein the second frame is operable to cause a connector to be created for the second GUI element for the one or more configuration choices in response to generation of the second GUI element, the connector providing an active link between the second GUI element and a property of a configuration element associated with the configuration choice, the connector allowing the second

GUI element to be automatically re-drawn in response to the configuration choice selection during the configuration workflow affecting the property of the configuration element without requiring the second frame to be re-drawn in its entirety at the client system.

33. The software of Claim 32, wherein:

the first frame comprises a plurality of JavaScript functions each operable when executed at the client system in response to a call to create a connector for a corresponding type of GUI element; and

the second frame comprises JavaScript code associated with the second GUI element for the one or more configuration choices the JavaScript code being generated automatically at runtime at the client system in response to generation of the second GUI element and operable to automatically call the JavaScript function in the first frame corresponding to the type of GUI element to create a connector for the second GUI element.

34. The software of Claim 24, further operable to generate a third frame associated with the web page at the server system for communication to the client system in association with the first and second frames, when executed at the client system the third frame operable to:

receive from the second frame data representing a configuration choice selection associated with the second GUI element;

post the data received from the second frame as a Hypertext Transfer Protocol (HTTP) request to the server system;

receive an HTTP response from the server system comprising data reflecting a current state of a configuration in relation to the configuration model, the current state reflecting the configuration choice selection at the second GUI element; and

communicate the data received from the server system to the second frame to initiate updating of a third GUI element.

35.   The software of Claim 24, wherein the software consists of the web page comprising the first and second frames.

36.   A system for automatically generating a graphical user interface (GUI) element at a client system according to a current configuration model, comprising:

means for generating a first frame associated with a web page comprising a JavaServer Page (JSP) and generated at a server system for communication to a client system in connection with a configuration workflow, when generated the first frame comprising data reflecting the current configuration model, when generated the first frame further comprising a JavaScript function operable when executed at the client system in response to a call to automatically:

receive a configuration choice selection at a first GUI element;

access the data stored in the first frame reflecting the current configuration model;

according to the accessed data, determine one or more configuration choices for which a second GUI element needs to be drawn for display to a user associated with the client system in connection with the configuration workflow in response to the configuration choice selection of the first GUI element; and

make a callback requesting that the second GUI element for the one or more configuration choices be drawn; and

means for generating a second frame associated with the web page comprising a JSP and generated at the server system for communication to the client system in association with the first frame, when generated the second frame comprising one or more parameters specifying the second GUI element that will be appropriate for the one or more configuration choices depending on the current configuration model as reflected in the data stored in the first frame in response to the configuration choice selection, when generated the second frame further comprising a JavaScript code operable when executed at the client system to automatically:

call the <u>JavaScript</u> function of the first frame to determine the one or more configuration choices for which the second GUI element needs to be displayed to the user associated with the client system in connection with the configuration workflow;

receive a callback from the <u>JavaScript</u> function of the first frame requesting that the second GUI element for the one or more configuration choices be drawn; and

according to the one or more parameters stored in the second frame, draw the second GUI element that is appropriate for the one or more configuration choices.

37. A system for automatically generating a graphical user interface (GUI) element at a client system according to a current product configuration model for a configurable product, comprising:

a first JavaServer Page (JSP) associated with a web page and generated at a server system for communication to a client system in connection with a product configuration workflow to configure the product, when generated at the server system the first JSP comprising data reflecting the current product configuration model, when generated at the server system the first JSP further comprising a JavaScript function operable when executed at the client system in response to a call to automatically:

receive a configuration choice selection at a first GUI element;

access the data stored in the first JSP reflecting the current product configuration model;

according to the accessed data in the first JSP, determine one or more configuration choices for which a second GUI element needs to be drawn for display to a user associated with the client system in connection with the product configuration workflow in response to the configuration choice selection of the first GUI element, each configuration choice being associated with one or more available selections for configuring a corresponding portion of the product; and

make a callback requesting that the second GUI element for the one or more configuration choices be drawn; and

a second JSP associated with the web page and generated at the server system for communication to the client system in association with the first JSP, when generated at the server system the second JSP comprising parameters specifying the second GUI element that will be appropriate for one or more configuration choices in general depending on the current product configuration model as reflected in the data stored in the first JSP in response to the configuration choice selection, when generated at the server system the second JSP further comprising JavaScript code operable when executed at the client system to automatically:

call the JavaScript function of the first JSP to determine the one or more configuration choices for which the second GUI element needs to be displayed to the user associated with the client system in connection with the product configuration workflow;

receive a callback from the JavaScript function of the first JSP requesting that the second GUI element for the one or more configuration choices be drawn; and

according to the parameters stored in the second JSP, draw the second GUI element that is appropriate for the one or more configuration choices, the second GUI element for the one or more configuration choices thereby being generated automatically on the fly at the client system.

38.   A system for automatically generating a graphical user interface (GUI) element at a client system according to a current configuration model, comprising one or more ~~software components~~ JavaServer Pages (JSPs) generated at a server system for communication to a client system in connection with a configuration workflow:

when loaded at the client system, the one or more ~~software components~~ JavaServer Pages (JSPs) comprising data reflecting the current configuration model;

when loaded at the client system, the one or more ~~software components~~ JavaServer Pages (JSPs) comprising one or more parameters specifying the GUI element that will be appropriate for a configuration choice depending on the current configuration model as reflected in the data; and

when executed at the client system, the one or more ~~software components~~
<u>JavaServer Pages (JSPs)</u> being operable to automatically:

receive a configuration choice selection at a first GUI element;

determine, according to the data reflecting the current configuration
model, one or more configuration choices for which a second GUI element needs to be
drawn for display to a user associated with the client system in connection with the
configuration workflow in response to the configuration choice selection; and

draw, according to the one or more parameters, the second GUI element
that is appropriate for the determined one or more configuration choices.

5.   Please Cancel Claims 7, 19, and 30.

Allowable Subject Matter

6.   Claims 1-6, 8-18, 20-29 and 31-38 are allowed over the prior art of record.

7.   The following is an examiner's statement of reasons for allowance: The Prior art does not teach or fairly suggest the subject matter of these claims. Independent Claims 1, 13, 24 and 36-38, when considered as a whole, are allowable over the prior art of record. Specifically, prior art of record fails to clearly teach or suggest the method of using a JavaServer Page to link a property of a configuration element to a configuration model such that a configuration choice made in a first frame for a configuration element assocated with the GUI automatically update other GUI elements in a second frame to reflect an updated state of configuration in the independent claims. While the prior art of record shows methods that present information on the screen dependent upon the selections of other GUI elements, they do not show the using JavaServer pages to automatically update other GUI elements upon an updated configuration state in two separate frames.

        Dependent claims 2-6, 8-12, 14-18, 20-23, 25-29 and 31-35 further add limitations to the allowable subject matter of the respective independent claims, thus are also allowable.

8.   Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sara M. Hanne whose telephone number is (571) 272-4135. The examiner can normally be reached on M-F 7:30am-4:00pm, off on alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, WEILUN LO can be reached on (571) 272-4847. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

smh

BA HUYNH
PRIMARY EXAMINER